REMARKS

Claims 1-75 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Section 103(a) Rejections:

The Office Action rejected claims 1-21, 30-49, 52-69 and 75 under 35 U.S.C. § 103(a) as being unpatentable over Faulkner et al. (U.S. Patent No. 6,434,605)) (hereinafter "Faulkner") in view of "Behavioral Specification Using XML" by McKee and Marshall (hereinafter "M&M"). Claims 22 and 50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Faulkner in view of M&M and further in view of Antoun (U.S. Patent 6,216,151). Claims 23-29, 51 and 70-74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Faulkner in view of M&M and further in view of Brown et al. (U.S. Patent 6,646,659) (hereinafter "Brown"). Applicants respectfully traverse these rejections for at least the following reasons.

Regarding claim 1, the Examiner states, "Faulkner does not explicitly describe the communications through data representation language and the ordered set of messages and their associated sequence being described in a data representation language schema. However, it is well known in the art that in a distributed computing environment using data representation language communications, a data representation language schema can describe any proper sequences in order to insure a service can be accessed and used as intended as shown by M&M." Applicants respectfully disagree with the Examiner's contention regarding the teaching of M&M.

M&M teaches the "use of XML to describe system resources and application resource requirements" (M&M, section 2, paragraph 1). M&M also teaches using XML to extend software interface definitions to "include information about constraints on the ranges of the inputs, any pre and post conditions that apply and any invariants" (M&M, section 4, paragraph 1, lines 20-23). Applicants can find <u>no reference in M&M regarding</u>

the sequencing of messages or of describing an ordered set of messages in a data representation schema and therefore submit that M&M fails to show that it is well known in the art to use a data representation language schema to describe any proper sequences or order to ensure a service can be accessed and used as intended.

Further regarding claim 1, the Examiner states, "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Faulkner and modify it as indicated by M&M where a method for communicating in a distributed computing environment, comprises: receiving a first message in a data representation language from a first source to be sent to a destination, wherein the first message is one of an ordered set of messages receivable by the destination and described in a data representation schema; verifying a sequence of the first message in the ordered set of messages receivable by the destination according to the data representation language schema; sending the first message to the destination if the first message is in sequence; and not sending the first message to the destination if the first message is not in sequence." Applicants respectfully assert that the Examiner's contention is not supported by the teachings of the cited art.

Faulkner teaches a system wherein "[s]equence numbers may be attached as tags to messages so that messages are sent and received in the same order" (Faulkner, column 3, lines 7-9). Faulkner further teaches that sequence numbers are useful for guaranteeing that messages are "delivered in the same order they were taken from the transmission queue" (Faulkner, column 8, lines 36-39) and that "each message is sent such that it is tagged with an individual sequence number that is increased by one for each message sent" (Faulkner, column 8, lines 40-43).

Hence, Faulkner teaches verifying that messages are received in the same order that they were sent. However, Faulkner does not teach verifying a sequence of the first message in the ordered set of message receivable by the destination according to a data representation language schema. Further, Applicants can find no suggestion in Faulkner

regarding any desirability to describe an ordered set of messages in a data representation schema.

As shown above, M&M teaches the use of XML to describe system resources and application resource requirements. Additionally, Applicants can find <u>no teaching in M&M relating to verifying a sequence of a message in an ordered set of messages receivable by the destination according to the data representation language schema</u>.

Thus, Applicants assert that the prior art fails to suggest to modify Faulkner in view of M&M as suggested by the Examiner. Contrary to the Examiner's assertion, the cited art does not teach a method for communicating in a distributed computing environment, comprising: receiving a first message in a data representation language from a first source to be sent to a destination, wherein the first message is one of an ordered set of messages receivable by the destination and <u>described in a data representation schema</u>; verifying a sequence of the first message in the ordered set of message receivable by the destination <u>according to the data representation language schema</u>.

Applicants further assert that the Examiner's proposed modification of Faulkner in view of M&M is contrary to Faulkner's teachings. Faulkner teaches the use of embedded sequence number tags. Faulkner teaches embedding sequence number tags into messages specifically to allow his ACSER component to detect a sequence error and reset the sequence number of the next message to an expected value (Faulkner, column 8, lines 45-59). Modifying Faulkner to no longer use the sequence number tags would prevent the ACSER component from being able to reset the embedded sequence number tags as relied upon by Faulkner and hence significantly change a basic principle of the operation of Faulkner's system. Applicants respectfully remind the Examiner that "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious" M.P.E.P. § 2143.01, paragraph 11; *In re Ratti*, 270 F.2d 810, 123 USPQ 349.

In light of the above remarks, Applicants assert that the rejection of claim 1 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 1 apply to claims 31 and 58.

Regarding claim 2, the Examiner states, "Faulkner in view of M&M teaches ... notifying the first source if the first message is not in sequence." Applicants respectfully disagree with the Examiners interpretation of Faulkner.

Faulkner teaches that the notifications are log entries, facsimiles, e-mail message and event telephone calls (Faulkner, column 9, lines 2-9) sent to people "i.e. administrators, service personnel and the like" (Faulkner, column 6, lines 47-49), not to the source of the out of sequence message.

In light of the above remarks, Applicants assert that the rejection of claim 2 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 2 apply to claims 32, and 59.

Regarding claim 3, the Examiner states, "Faulkner in view of M&M teaches ... the first source resending the first message in response to said notifying." Applicants disagree with the Examiner's interpretation of Faulkner. Faulkner teaches that if a sequence error is detected, and the communication channel has failed, a channel reset command is issued which "resets the sequence values that are tagged to messages to the correct sequence number" (Faulkner, column 8, lines 54-59). Additionally, Faulkner teaches "[a] reset of the sequence value to a known sequence value is initiated such that the next message to be sent in the sequence is tagged with a known sequence value" (Faulkner, column 3, lines 59-63). Hence, Faulkner teaches that the sequence values should be reset so that both the sender and receiver expect the next message to be tagged with a known sequence number.

Applicants can find no teaching in either Faulkner or M&M regarding a first source resending the first message in response to said notifying.

In light of the above remarks, Applicants assert that the rejection of claim 3 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 3 apply to claim 33.

Regarding claim 4, the Examiner states, "Faulkner in view of M&M ... teaches said receiving a first message, said verifying a sequence, and said sending the first message are performed by a message conductor configured to send messages in sequence to the destination according to the data representation language schema." Applicant disagree with the Examiner's interpretation of Faulkner in view M&M. Faulkner teaches a system wherein "[s]equence numbers may be attached as tags to messages so that messages are sent and received in the same order" (Faulkner, column 3, lines 7-9). Faulkner further teaches that sequence numbers are useful for guaranteeing that messages are "delivered in the same order they were taken from the transmission queue" (Faulkner, column 8, lines 36-39). Thus, under Faulkner there is no provision for a message conductor configured to send messages in sequence to the destination <u>according to the data representation language schema</u>.

Further, Applicants can find no teaching or suggestion in M&M related to a message conductor configured to send messages in sequence to the destination according to the data representation language schema.

In light of the above remarks, Applicants assert that the rejection of claim 4 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 4 apply to claim 60.

Regarding claim 7, the Examiner states, "Faulkner in view of M&M ... teaches the service providing the message conductor to the client device." Applicants respectfully disagree with the Examiner's interpretation of Faulkner in view of M&M.

Faulkner teaches, "[a]n MCA is a program that controls the sending of and receiving of messages" and is "positioned at each end of a channel" (Faulkner, column 2, lines 27-29, and Figure 6). Applicants can find no teaching if Faulkner regarding a service providing a message conductor to a client device.

M&M teaches the dynamic loading of "services by sending programs along with the information they are sending across a network" (M&M, section 1, paragraph 1, lines 15-18) and the use of XML to describe system resources and application resource requirements to "allow the user or service provider to build collaborative applications with predictable performance characteristics" (M&M, section 3, paragraph 1, lines 1-3). Applicants can find no teaching in M&M regarding a service providing a message conductor to a client device.

In light of the above remarks, Applicants assert that the rejection of claim 7 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 7 apply to claim 12.

Regarding claim 9, the Examiner states, "Faulkner in view of M&M teaches ... a message conductor configured to verify the sequence of messages according to the data representation language schema." Applicant disagree with the Examiner's interpretation of Faulkner if view of M&M.

As shown above in the arguments regarding claim 1, Faulkner in view of M&M does not teach or suggest verifying a sequence of messages according to a data representation schema and therefore also fails to teach or suggest a message conductor configured to verify the sequence of messages according to the data representation language schema.

In light of the above remarks, Applicants assert that the rejection of claim 9 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 9 apply to claim 63.

Regarding claim 14, the Examiner states, "Faulkner in view of M&M teaches ... receiving a plurality of messages in the data representation language from a plurality of sources to be sent to the destination, wherein the plurality of messages are each from the ordered set of messages receivable by the destination and described in the data representation language schema; verifying a sequence of the plurality of messages in the ordered set of messages receivable by the destination according to the data representation language schema." Applicant disagree with the Examiner's interpretation of Faulkner if view of M&M.

As shown above in the arguments regarding claim 1, Faulkner in view of M&M does not teach or suggest verifying a sequence of messages according to a data representation schema and therefore also <u>fails to teach</u> or suggest wherein a plurality of messages are each from the ordered set of messages <u>described in the data representation language schema</u> and <u>verifying a sequence of the plurality of messages</u> in the ordered set of messages <u>according to the data representation language schema</u>.

In light of the above remarks, Applicants assert that the rejection of claim 14 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 14 apply to claim 64.

Regarding claim 18, the Examiner states, "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Faulkner and modify it as indicated by M&M where a method for communicating in a distributed computing environment, comprises: receiving a plurality of request messages in a data representation language from a first source to be sent to a destination, wherein the plurality of request messages are an ordered set of messages receivable by the destination and described in a data representation schema; verifying a sequence of the

plurality of request messages receivable by the destination according to the data representation language schema; and sending the plurality of request messages in sequence to the destination." Applicants respectfully disagree with the Examiner.

Faulkner teaches a system wherein "[s]equence numbers may be attached as tags to messages so that messages are sent and received in the same order" (Faulkner, column 3, lines 7-9). Faulkner further teaches that sequence numbers are useful for guaranteeing that messages are "delivered in the same order they were taken from the transmission queue" (Faulkner, column 8, lines 36-39) and that "each message is sent such that it is tagged with an individual sequence number that is increased by one for each message sent" (Faulkner, column 8, lines 40-43).

Hence, under Faulkner there is no provision for verifying a sequence of the plurality of request messages receivable by the destination according to the data representation language schema, just that messages are received in the same order that they were sent.

Applicants can find no reference in M&M regarding the sequencing of messages or of verifying the sequence of messages according to a data representation schema.

In light of the above remarks, Applicants assert that the rejection of claim 18 is not supported by the cited art and withdrawal of the rejection is respectfully requested. Similar remarks as discussed above in regard to claim 18 apply to claims 46, and 67.

Applicants also assert that numerous other ones of the dependent claims recite further distinctions over the cited art. Since the rejection has been shown to be unsupported for the independent claims, a further discussion in regard to the remaining dependent claims is not necessary at this time.
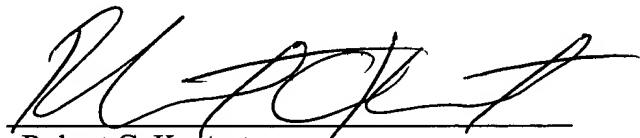
CONCLUSION

Applicants submit the application is in condition for allowance, and notice to that effect is requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicants hereby petition for such extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-70100/RCK.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard

☐ Petition for Extension of Time

☐ Notice of Change of Address

☐ Fee Authorization Form authorizing a deposit account debit in the amount of $ for fees (   ).

☐ Other:

Respectfully submitted,

Robert C. Kowert
Reg. No. 39,255
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398
Phone: (512) 853-8850

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